

[54] **CHITIN DERIVED SURGICAL GLOVE POWDER**

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[58] Field of Search 2/168; 128/1 R, 221, 128/260, 348, 349 R, DIG. 16; 206/63.3, 210, 363-366, 438-439; 252/12; 424/180; 536/20

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,728,739	4/1973	Semp	128/1
3,810,458	5/1974	Semp	128/1 R
3,846,382	11/1974	Ramsey et al.	128/1 R
3,911,116	10/1975	Balassa	424/180

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[57]

ABSTRACT

Natural or synthetic rubber surgical elements such as tubing, catheters, drains and gloves are "lubricated" so as to prevent sticking during storage, and permit easier emplacement, such as putting on the gloves by a surgeon or nurse, by applying to the surface of the rubber element

a finely divided biodegradable powder consisting essentially of

an enzymatically degradable form of poly(N-acetyl-D-glucosamine) selected from the group consisting of

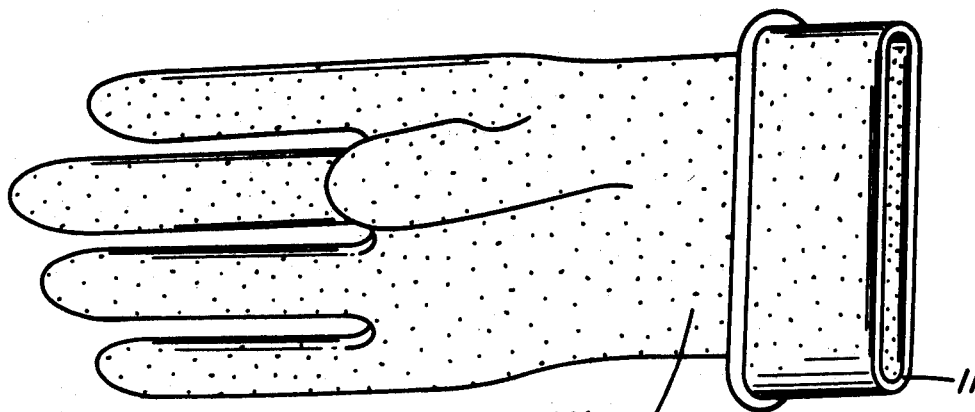
poly[N-acetyl-6-O-(carboxymethyl)-D-glucosamine],

poly[N-acetyl-6-O-(2'-hydroxyethyl)-D-glucosamine],

poly[N-acetyl-6-O-(ethyl)-D-glucosamine], and poly(N-acetyl-D-glucosamine) itself

This powder is readily absorbed by living tissue without deleterious tissue reaction, thus minimizing tissue reaction from the transfer of the powder from the element such as a glove to internal sites in a subject. The gloves may be packaged in a strippable laminate package. The polymers are derived from chitin.

6 Claims, 4 Drawing Figures



12 POWDERED ENZYMATICALY
DEGRADABLE FORM OF POLY-
(N-ACETYL-D-GLUCOSAMINE)
TO LUBRICATE SURFACE